ABSTRACT OF THE DISCLOSURE

An adaptive, deterministic approach for updating network routing information is disclosed. From among a set of routers, each of which is associated with an amount of time relative to a destination, the router that is associated with the lowest amount of time is selected. A "forward ant" data packet, which indicates the destination, is sent to the selected router. A "backward ant" data packet is received. The "backward ant" data packet indicates an amount of time taken for the "forward ant" data packet to travel to the destination. Based on this amount of time, the amount of time that is associated with the selected router is updated. Based on information contained in the "backward ant" data packet, the routing table is updated.